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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,272	07/22/2004	Stefan Michael Schneider	PHDE020022US	9807

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
595 MINER ROAD  
CLEVELAND, OH 44143

EXAMINER

YUN, JURIE

ART UNIT PAPER NUMBER

2882

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/502,272	<b>Applicant(s)</b> SCHNEIDER ET AL.	
	<b>Examiner</b> Jurie Yun	<b>Art Unit</b> 2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-9, 11, 13-16, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 6, 12 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/12/06</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. The amendment filed 2/28/06 has been entered.

***Claim Objections***

2. Claim 16 is objected to because of the following informalities: there is lack of antecedence for "the lamellae". Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 8, 9, 13-15, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (USPN 6,470,072 B1) in view of Leask (USPN 3,988,589).
5. With respect to claims 1, 8, and 9, Johnson discloses an imaging device for generating an image of an object or part of an object by X-radiation, comprising a detector (18) having a grid (20) for the absorption of X-rays (X-ray source, 12), wherein the grid (20) comprises wall elements (32), which wall elements include a mixture of a material which is flowable in the processing state and an absorption material absorbing electromagnetic radiation. The wall elements are produced by injection molding (column 3, lines 37-46).

Johnson discloses all of the elements except that the wall elements exhibit a double comb structure with webs projecting on two sides from a base surface. Leask discloses a grid (Fig. 2) wherein the wall elements (6 & 12) exhibit a double comb

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structure with webs projecting on two sides from a base surface (4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply this teaching to Johnson, and employ wall elements which exhibit a double comb structure with webs projecting on two sides from a base surface, to enable modularity of the grid which is easy to fabricate and assemble, as taught by Leask (column 2, lines 40-45).

With respect to claims 2, 13, and 18, Johnson discloses the absorption material is embedded in the mixture in the form of particles (column 3, lines 37-46).

With respect to claims 3, 14, and 19, Johnson discloses the material which is flowable in the processing state contains or consists of a thermoplastic polymer selected from the group of polypropylene, liquid crystal polymer, polyamide, polycarbonate and/or polyoxymethylene (column 3, lines 37+).

With respect to claims 4 and 15, Johnson discloses the absorption material comprises a heavy metal (column 3, lines 37-46).

6. Claims 7, 11, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (USPN 6,470,072 B1) in view of Leask (USPN 3,988,589) as applied to claims 1, 8, and 9 above, and further in view of Flisikowski et al. (USPN 6,363,136 B1).

7. With respect to claims 7, 11, and 16, Johnson as modified by Leask does not disclose the wall elements are arranged alternately with lamellae of an absorbent material. Flisikowski et al. disclose wall elements (Figs. 9-11, 15) arranged alternately with lamellae (19) of an absorbent material. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have lamellae of an

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absorbent material arranged alternately with the wall elements of Johnson as modified by Leask, depending on the application being done. Anti-scatter grids vary in shape and structure depending on the application and placement in the apparatus, so enabling an anti-scatter grid to be modular is desirable, widening applicability of the grid to various uses.

***Allowable Subject Matter***

8. Claims 6, 12, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: Prior art fails to teach a grid having wall elements absorbing electromagnetic radiation, wherein the base surface takes the form of an absorbent foil provided with perforation holes, wherein the webs are connected from one side of the foil to the other through the perforation holes, as claimed in claims 6, 12, and 17.

10. Claim 10 is allowed.

11. The following is an examiner's statement of reasons for allowance: Prior art fails to disclose a method of producing a grid having wall elements absorbing electromagnetic radiation, wherein the base surface takes the form of an absorbent foil provided with perforation holes, wherein the webs are connected from one side of the foil to the other through the perforation holes, as claimed in claim 10.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

12. Applicant's arguments filed 2/28/06 have been fully considered but they are not persuasive. Applicants argue that there is no motivation or suggestion to combine the references as suggested because the primary objective of Johnson is to provide a grid that can be mechanically bent or flexed so as to change the focal length, whereas Leask is directed to a mechanically rigid device. Applicants further argue that press fitting (or possibly cementing) a plurality of modules as taught by Leask would be especially problematic in a flexible device as the number of joints would need to withstand the requisite flexing without failure. However, the fact that Leask is directed to a mechanically rigid device is not pertinent. Johnson teaches a grid made up of a mixture of a material which is flowable in the processing state and an absorption material. Leask was relied upon *solely* for the teaching of a *double comb structure with webs extending on two sides from a base surface*. The fact that Leask discloses these are mechanically rigid is immaterial. As stated above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of a double comb structure to Johnson, to enable modularity of the grid which is easy to fabricate and assemble, as taught by Leask (column 2, lines 40-45). Also, the fact that press fitting (or possibly cementing) a plurality of modules as taught by Leask would be especially problematic in a flexible device as the number of joints would need to withstand the requisite flexing without failure, is not pertinent to the issue. Leask was

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relied upon *solely* for the teaching of a *double comb structure with webs extending on two sides from a base surface*. Applicants also argue that another of Johnson's objective is to simplify the manufacturing process by minimizing or eliminating the number of pieces to be assembled, and that the modularity espoused by Leask is contrary to this objective. However, Johnson teaches the grid structure to be integrally formed, and Figure 3 depicts an exemplary two-dimensional focused grid. This grid, if turned 90 degrees, is shown as a triple comb structure with webs extending on two sides from a respective base surface. Thus, Johnson is shown to be capable of making the structure taught by Leask. It is believed that the rejection is valid and consequently is made final.

### ***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jurie Yun whose telephone number is 571 272-2497.

The examiner can normally be reached on Monday-Friday 8:30-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jurie Yun  
April 12, 2006



EDWARD J. GLICK  
SUPERVISORY PATENT EXAMINER